
WELCOME

The following material is being provided for informational purposes and in order to promote safety awareness. It does not constitute nor should it serve as a substitute for legal or other professional advice. Alcatel-Lucent makes no representations or warranties of any kind, express or implied, in providing this material.

EHS COMMITMENT FROM THE TOP



Michel Combes

CEO Alcatel-Lucent

2013 Sustainability Report

*My ambition is for Alcatel-Lucent to be **the** recognized leader in sustainability and responsible business innovation for the technology industry.*

..... Right First Time
SAFE EVERY TIME

ZERO TOLERANCE SAFETY PRINCIPLES



We always use the appropriate Personal Protective Equipment and Fall Arrest systems when working at heights.



We never work under the influence of alcohol or drugs.



We never work on energized equipment or in the vicinity of high voltage power transmission lines unless qualified.



We always have a lift plan when performing a critical lift.



We never exceed speed limits or travel at speeds which are dangerous for the type of road, vehicle, or conditions.



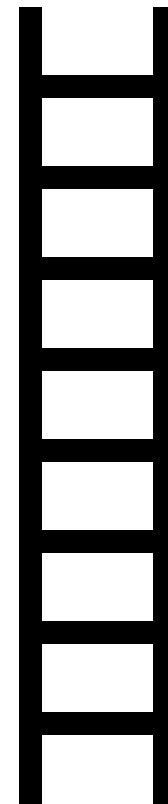
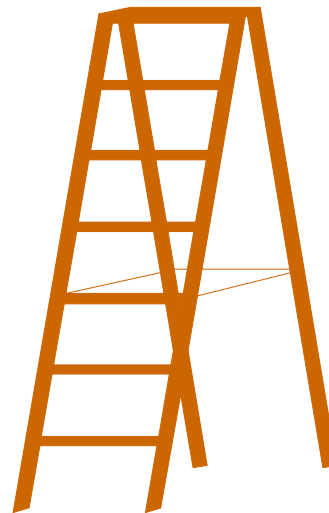
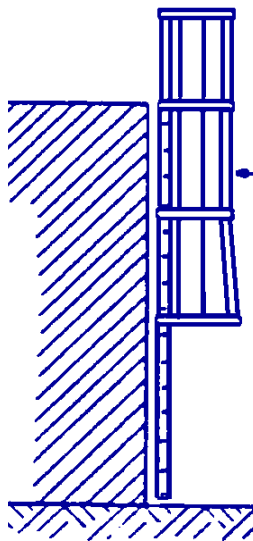
We always wear seat belts when traveling in, or operating vehicles.



We never use a hand held phone or text while driving.

Ladder Safety Training

LES197WG- December 2014



Alcatel-Lucent Ladder History

Alcatel-Lucent employees are regularly exposed to elevated heights as an aspect of the work being conducted.

Ladders used extensively by:

- ALU Project and Field Operations
- ALU REGS Building Maintenance

Ladder Accident History

Accidents resulted from:

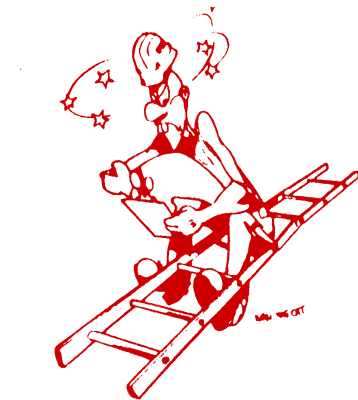
- ascending/descending
- fall off ladder
- ladder collapse / movement
- failure to use ladder chocks
- carrying the ladder
- miscellaneous or unknown reasons



Root Causes

From information available, all of the ladder incidents were preventable:

- Inattentiveness
- Not taking the time to do the job safely
- “Cutting corners”
- Failure to adhere to basic ladder rules



Categories of Ladders

Portable

- Self supporting (i.e., stepladders)
- Non-self supporting (i.e., straight ladders)
- Folding/Telescoping Ladder
 - North America example
 - R-6147(CIE10-07)
- Fixed

Choosing the right ladder

Selection factors:

- Height
- Purpose
- Job site conditions
- Duration
- Working load
- Ladder construction

Choose a ladder that is rated for the use and the combined weight of the climber and supplies.

Duty Ratings

Type IAA

- Special Duty
- 375 pound (170 kg) capacity-special requirements for issue. See your Supervisor. If your circumstances exceed this weight limit, you should engage your management team.

Type IA

- Extra Heavy Duty
- 300 pound (136 kg) capacity
- Recommended for frequent applications in industry, utilities and contractors

Duty Ratings

Type I

- Heavy duty industrial
- 250 pound (113 kg) capacity

Type II

- Medium duty commercial
- 225 pound (102 kg) capacity
- Used in offices or light maintenance

Type III

- Light duty household use
- 200 pound (90 kg) capacity

Job Site Conditions

Is an upper support available?

Is the ladder on a level base?

Are electrical hazards present?

- When working near electricity, use a ladder with non-conducting side rails, and BE CAREFUL. No ladder is completely safe from the dangers of electricity.

Care and Storage

- Store ladders on racks.
- Secure stored ladders.
- Do not store ladders in Battery Rooms.
- Do not store wooden ladders in damp places.
- Do not paint wood ladders unless using wood preservatives or clear finishes.
- Never stack materials on ladders.

Ladder Inspection

Inspect each ladder

- before first use each shift
- after any incident that might affect its safe use
- Report defects immediately, tag them as defective and take them out of service.



Portable Ladder Safety

- Use only for the purpose designed
- Face the ladder at all times
- Use both hands
- Carry tools in a pouch
- Raise and lower heavy items by a separate hoist
- Keep ladders and shoes clean

Portable Ladder Safety

- Never move a ladder when someone is on it
- Use barricades
- Select proper ladder for the working load
- Follow warnings & instructions
- Do not use any type of portable rolling ladders or stepladders as a straight ladder

Portable Ladder Safety

- Only 1 person at a time
- Two employees may be on portable rolling ladders and stepladders of the so called A-type with steps on either side, provided there is one on each side.
- A portable rolling ladder must be chocked if a self-locking arrangement is not provided.

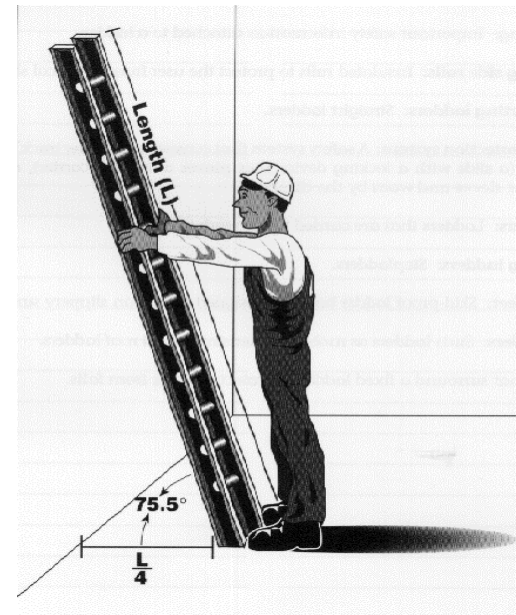
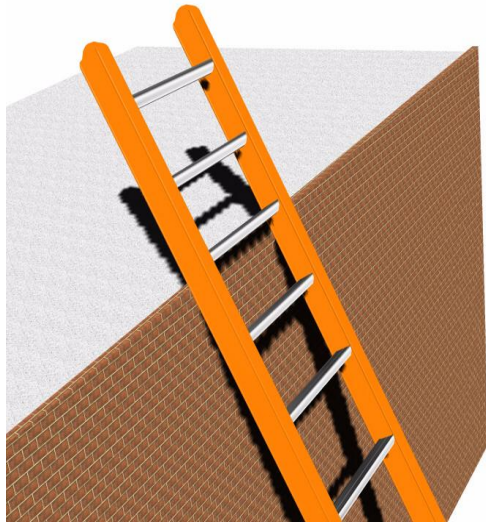


Stepladder Safety

- Never use in partially opened position.
- Spreaders must be locked.
- All feet in contact with firm and level surface
- Do not step any higher than the indicated “highest standing level”.
If not marked, no higher than second step from top.
- Do not step on the pail shelf or rear braces.
- Avoid Leaning to reach a task.

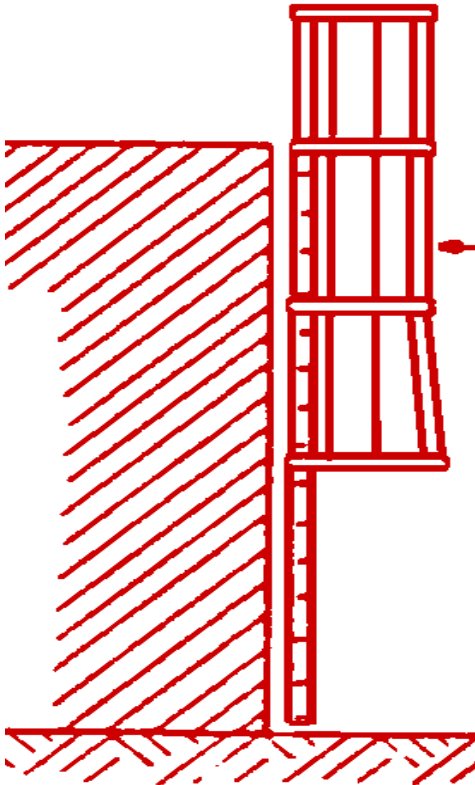
Straight/Extension Ladder Safety

- Position at the proper angle.
- Provide a firm level support for the base.
- Support both side rails.
- Extend ladder at least **3 feet (0.91 meters)** above the landing.
- Always maintain at least **3 points of contact**.



Fixed Ladders

- Cages, wells or fall protection systems must be provided for fixed ladders greater than 20 feet (6 meters) in length.
- Rules for using fixed ladders are the same for those of portable ladders.



Track Supported Ladders

- Also known as facility rolling ladders
- Do not use a ladder supported by a defective track.
- Can be found:
 - Equipped with a brake (spring loaded or overhead brake), or
 - Not equipped with a brake.



Track Supported Ladders

Track Supported Ladder equipped with overhead brake



Track Supported Ladders

Track Supported Ladder equipped with spring loaded brakes

Never lift weight of body from ladder by grasping overhead ironwork. This act, will release the brake.



Track Supported Ladders

Track Supported Ladder **not** equipped with brakes



Using Track Supported Ladders

Not equipped with a brake

- Do not use unless ladder stops/chocks/blocks are in place
- Ask customer for chocks when not readily available.
- Check with your local EHS Resource if necessary.



Ladder Stops / Chocks / Blocks

- To be placed under one wheel
- Chocks are made of wood or metal
- Maximum braking effect is secured by placing it under the wheel nearest the equipment on which work is being done.



Moving Track Supported Ladders

- Before moving a ladder, make certain that no employee or equipment is on or below the ladder.
- Do not leave unattended ladders across aisles.



Ladder Seats

- Use on track supported ladders only.
- Do not stand on ladder seats.
- Two types of ladder seats available:
 - Wood Ladder Seats
 - Metal Ladder Seats



Ladder Seats

- Inspect wooden seats for loose nuts and screws, longitudinal cracks, and splits.
- Avoid contacting fuse panels, wiring, or equipment while transporting and placing ladder seats.
- Do not carry tools or equipment in the tool compartment of a ladder seat.



Installation of Wood Ladder Seats

- Place seat on step with hooks extending over and beyond step.
- Tilt the ladder seat slightly upward at outer end, pull forward until hooks are fully engaged at rear of the step, and then lower the seat until footrest is against next lower step.

Removal of Wood Ladder Seats

- To remove a wooden ladder seat from a ladder, reverse the procedure previously described.

Installation of Metal Ladder Seats

- Before placing on a ladder, check that the lock handle is in the released position.
- Tilt seat end slightly upward and place tool box between desired steps of ladder.
- Guide ladder seat toward ladder until lip at tool box end is slightly to rear of upper step and bottom of ladder seat rests on a lower step.
- Slide bottom of ladder seat to rear of lower step, checking that the lip at tool box end comes to rest behind upper step as locking clamp slips into place over rear edge of lower step.
- Operate lock handle to secure ladder seat to lower step by means of locking clamp.

Removal of Metal Ladder Seats

- Release lock handle.
- Disengage locking clamp by operating lock handle.
- With lock handle in release position, slide bottom of ladder seat out from ladder.
- Tilt seat end up slightly and tool box end down until lip clears rear of upper step and then draw seat clear from ladder.

All Ladder Seats

- Before placing body weight on a seat, check that seat is firmly and securely in place.

Danger: On some earlier ladders, the dimensions of the steps are such that the seat can be engaged with the step and have the appearance of being secure, but the locking mechanism will not function properly to clamp the seat in position. Do not use the metal ladder seat under such conditions.

Methods to Mount and Dismount Ladder Seats

First Method

- Ascend the ladder to the second step below the footrest of the ladder seat.
- With one hand grasping the handrail and the other hand grasping the side rail of the ladder, place one foot on the step below the footrest and step up with the other foot to straddle the ladder seat.
- To get into a comfortable working position, swing one leg up and over the seat while still grasping the handrail or side rail with one hand, turn the body toward the work area.
- Place both feet on the footrest.

To dismount from the seat, reverse the above procedure.

Methods to Mount and Dismount Ladder Seats

Second Method

- In approaching the ladder seat, ascend the ladder on the side to be faced when working on the equipment.
- Place one foot on the step below the footrest which will position the hips slightly above the ladder seat.
- In stepping up with the other foot, turn the body to face the equipment.
- Sit down on the seat and place both feet on the footrest. Care should be exercised in turning so that the feet do not slip off the ladder step.
- To dismount from the seat, reverse the above procedure.
- During the entire procedure, a firm grip must be maintained on the handrail or the side rail of the ladder as the ladder may be inclined to tilt slightly.

Preventing Ladder Accidents

- Choose the right ladder for the job.
- Inspect the ladder before use.
- Set up ladder with care.
- Climb and descend ladders cautiously.
- Always maintain at least 3 points of contact.
- Observe upper standing limit.
- Do not “ride” rolling ladders or use unless properly anchored by brakes or ladder stops.

Preventing Ladder Accidents

- Move ladder rather than reach out too far.
- Keep ladders free of dirt and oil and keep footwear clean.
- Do not leave tools, or materials on unattended ladders unless securely fastened.
- Do not jump or swing on or off a ladder.
- In descending a ladder, make certain that the last step has been reached before stepping to the floor.
- You know you reaching too far when your belly button is outside the ladder side rail.

Preventing Ladder Accidents

The area around the base of the ladder should be uncluttered.

Barricade or guard the ladder.



Don't do this...



Or this...



Summary

- Choose the right ladder for the job.
- Always maintain 3 points of contact.
- Secure the ladder. Secure yourself.

Questions or Comments?

Contact:

- Your local EHS Coordinator for ladder selection and technical assistance if needed.

Regional EHS Leaders

APAC - [Ong Wee Liang](#)

CALA - [Martha Montes](#)

EMEA - [Robert Nolan](#)

NAR - [Rich Quick](#)